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| APPLICATION NO.                                                                                                   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-------------------------------------------------------------------------------------------------------------------|-------------|----------------------|---------------------|------------------|
| 10/813,613                                                                                                        | 03/30/2004  | Shinpei Nagatani     | 1324.70221          | 4370             |
| 7590 01/08/2008                                                                                                   |             |                      |                     |                  |
| Patrick G. Burns, Esq.<br>GREER, BURNS & CRAIN, LTD.<br>Suite 2500<br>300 South Wacker Drive<br>Chicago, IL 60606 |             |                      |                     |                  |
|                                                                                                                   |             |                      | EXAMINER            |                  |
|                                                                                                                   |             |                      | MA, CALVIN          |                  |
|                                                                                                                   |             |                      | ART UNIT            | PAPER NUMBER     |
|                                                                                                                   |             |                      | 2629                |                  |
|                                                                                                                   |             |                      | MAIL DATE           | DELIVERY MODE    |
|                                                                                                                   |             |                      | 01/08/2008          | PAPER            |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/813,613

Applicant(s)

NAGATANI ET AL.

Examiner

Calvin Ma

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) 5-26 and 28-33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                                                                                |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                                                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                                           | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/23/2007 07/27/2004</u> . | 6) <input type="checkbox"/> Other: _____                                                |

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Information Disclosure Statement***

2. The information disclosure statement (IDS) submitted on 07/27/2004 and 11/23/2007 had been received. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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4. Claims 1-3 and 27 are rejected under 35 U.S.C. 102(e) as being anticipated by Kim et al. (US Pub: 2002/0001184)

As to claim 1, Kim discloses an illumination device (600) comprising:

a plurality of optical waveguides (i.e. the center waveguide formed by 500, 400 and 300, each of the lamp in the stackable lamp assembly) (see Fig. 1, [0047]) each including a light diffusion reflecting surface (i.e. the diffusive films 500, reflective film 300 and the cavity that is formed by reflective area around the lamp including 250, 760, and 310 which in combination with the material filling the rest of the lamp assembly forms the diffusion reflecting surface) (see Fig. 1, 3, [0047], [0052]) for diffusing and reflecting guided light, a light emission surface for emitting the diffused and reflected light (i.e. the various lamps in the multiple assemblies 200), and a plurality of light-emitting areas (i.e. each of the lamp assembly 200) in which the light diffusion reflecting surface is formed and which are separated from each other, the plurality of optical waveguides being stacked (i.e. the central wave guide and the two side assembly stacks which has lamps which functions as waveguide and are stacked together) (see Fig. 1, 3, 10, [0037], [0047], [0068]) so that the plurality of light-emitting areas are disposed almost complementarily when viewed in a direction vertical to the light emission surface (i.e. the multiple lamps in the assembly are complementarily when viewed vertically) (see Fig. 3, [0047]);

and a plurality of light sources (i.e. the light wires that reside inside each of the lamp) respectively disposed at ends of the plurality of optical waveguides (i.e. the lamps have the lamp wires at the end connection the to outside connections) (see Fig. 2, [0039], [0040], [0041]).

As to claim 2, Kim teaches an illumination device according to claim 1, wherein the light diffusion reflection surfaces are disposed not to overlap with each other between the plurality of optical waveguides when viewed in the direction vertical to the light emission surface (i.e. the diffusion film are not of the same size as the size as the side assemblies and do not overlap each other completely) (see Fig. 1, 7, [0062])

As to claim 3, Kim teaches an illumination device according to claim 1, wherein the light diffusion reflection surfaces are disposed to partially overlap with each other between the plurality of optical waveguides when viewed in the direction vertical to the light emission surface (i.e. diffusion reflection surface partially overlap in the center and when viewed vertically the side assembly and the center area also partially overlap) (see Fig. 1, 7, [0062]).

As to claim 27, Kim teaches a display apparatus comprising a display panel including a display area and an illumination device for illuminating the display area, wherein the illumination device is the illumination device according to claim 1 (see Fig. 1, [0035]).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kim in view of Beeteson (US Patent: 5,796,382).

As to claim 4, Kim teaches an illumination device according to claim 1, but does not explicitly teach further comprising a light source control system for sequentially intermittently turning on the plurality of light sources. Beeteson teaches a light source control system for sequentially intermittently turning on the plurality of light sources (see Fig. 2, Col. 2, Line 37 – Col. 3, Line 17).

Therefore it would have been obvious for one of ordinary skill in the art at the time the invention was made to have used the independent light controlling capability to the overall illumination system of Kim in order to reduce power consumption (see Beeteson, Col. 1, Lines 57-60)

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Huang et al. (US Patent: 5,965,907) is cited to teach a three layer lighting OLED system.

### ***Inquiry***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Calvin Ma whose telephone number is (571)270-1713. The examiner can normally be reached on Monday - Friday 7:30 - 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chanh Nguyen can be reached on (571)272-7772. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number:  
10/813,613  
Art Unit: 2629

Page 7

January 2, 2008  
Calvin Ma.

A handwritten signature in black ink, appearing to read 'Chanh D. Nguyen', written in a cursive style.

CHANH D. NGUYEN  
SUPERVISORY PATENT EXAMINER